FEI | Faith Engineering, Inc.

541 Quantum Rd. NE
Rio Rancho, New Mexico 87124
(505) 243-5494 • FAX (505) 892-1505
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April 25, 2002

Mr. Nolan Bennett
Environmental Health Scientist
Bernalillo County Environmental Health Department
600 Second St. NW, Suite 500
Albuquerque, NM 87102

Sent via e-mail: nbennett@bernco.gov and US Mail

RE: Transmittal of 5th Quarterly Ground Water Sampling Results
701 Isleta SW, The Phil's Auto Site; NMED/USTB Facility ID No. 5517001 / 1537
Contract Control No. 980473
FEI Project No. 99-02-1185-05

Dear Nolan:

Please find included herewith the report for the fifth quarter of ground water sampling and analysis for the subject site. Ground water sampling was conducted on March 28, 2002.

This sampling event provides the ground water sampling results with field testing for 12 of the 13 ground water monitoring wells on and adjacent to the site. During this quarter's sampling event, no hydrocarbon constituent concentrations were above the NMWQCC standards. Benzene concentrations have been non-detectable in all of the site's monitoring wells since sampling was conducted for the initial site investigation in September 2000. Please refer to the Hydrogeologic Investigation Report dated May 15, 2001 for the extent of soil contamination. It should be noted that manganese concentrations above the standard of 0.2 mg/l were found in seven (7) of the monitoring wells sampled and dissolved iron concentrations above the standard of 1.0 mg/l were found in three (3) wells. Results of the next quarter of ground water monitoring will be provided by 6/30/02.

Please do not hesitate to contact the undersigned if you have any questions or comments regarding this Sampling Report.

Respectfully submitted,

FAITH ENGINEERING, INC.

Stuart E. Faith, PE, CS #80
President

cc w/ encls: Ms. Lane Andress – NMED/USTB

FEI FILE NUMBER 99-02-1183-05

FIFTH QUARTERLY SAMPLING REPORT
PHIL'S AUTO SITE
701 ISLETA BLVD. SW
ALBUQUERQUE, NEW MEXICO
FACILITY #5517001/1537

PREPARED BY:

STUART FAITH, P.E.
FAITH ENGINEERING, INC.
541 QUANTUM ROAD NE
RIO RANCHO, NEW MEXICO 87124
(505) 243-5494 • FAX (505) 892-1505

APRIL 25, 2002

PREPARED FOR:

THE BERNALILLO COUNTY ENVIRONMENTAL HEALTH DEPARTMENT
AND
THE NEW MEXICO ENVIRONMENT DEPARTMENT
UNDERGROUND STORAGE TANK BUREAU

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FORM 1223
QUARTERLY MONITORING REPORT

Please include the following information:

1. **Site name:** Phil's Auto
2. **Responsible party:** Mr. Nolan Bennett
3. **Responsible party mailing address** (list contact person if different):

   Bernalillo County Environmental Health Dept.

   600 2nd Street NW, Suite 500

   Albuquerque, NM 87102
4. **Facility number:** 5517001/1537
5. **Address/legal description:** 701 Isleta Blvd. SW

   Albuquerque, NM
6. **Author/consulting company:** Faith Engineering, Inc.
7. **Date of report:** 04/25/2002
8. **Date of confirmation of release or date USTB was notified of the release:**

   July 1987

STATEMENT OF FAMILIARITY

I, the undersigned, am personally familiar with the information submitted in this report and the attached documents and attest that it is true and complete.

Signature:_____

Name: Stuart Faith

Affiliation: Faith Engineering, Inc.

Title: President

Certified Scientist #: 080

Date:_____

I. INTRODUCTION:

I. A. Scope of Work

Faith Engineering, Inc. (FEI) has been retained by the Bernalillo County Environmental Health Department to provide professional environmental services at the Phil's Auto site, 701 Isleta SW, Albuquerque, New Mexico (the Site). The location of the Site is shown on Figure 1. This report documents the fifth quarter of ground water sampling conducted at the site on March 28, 2002. This is the first quarterly sampling event under the current Work Plan approved by the NMED/USTB on February 11, 2002. The period covered in this report is from November 2001 to April 2002.

I. B. This quarter's highlights

This sampling event represents the fifth quarter of ground water quality re-examination as outlined in the work plan approval letter dated 02/11/02, as amended to change the 5th quarterly report submission date. The sampling event provides the sample results with field testing for 12 of the 13 ground water monitoring wells on and adjacent to the site.

II. ACTIVITIES PERFORMED DURING THIS QUARTER:

II. A. Brief description of the remediation system and date installed

In 1994, Intera was retained by NMED/USTB to design and install a remediation system. Intera submitted a reclamation proposal to NMED/USTB in April of 1994 for the installation of a SVVS^{TM} in-situ reclamation system. Intera conducted a short-term pilot test on a combination sparge/vent well cluster located in the northern portion of the Site. An in-situ SVVS^{TM} remediation system was installed at the Site in 1995 and began operation in September of 1995. The reclamation system consisted of 33 sparge and vent well nests manifolded with underground PVC piping to an above ground treatment unit. Wells were constructed with 2" diameter, schedule 40 PVC with crushed stone surrounding the vent wells and 10/20 silica sand surrounding the sparge wells. Bentonite seals were emplaced to separate screened intervals and the land surface. The treatment unit consists of a 300 scfm catalytic oxidizer and vent and sparge blowers. The system operated between September 1995 and early 1996, when it was shut down.

II. B. Description of activities performed to keep system operating properly

None. System shut down in 1996.

II. C. Monitoring activities performed

Ground water monitoring and sampling at the Site during this quarter took place on March 28, 2002. This quarter's sampling included the following:

- ground water elevation measurements in all wells.
- quarterly event ground water sampling of monitor wells MW-A, MW-1, MW-2, MW-3, MW-4, MW-5, MW-10, FTW-1, FTW-2, FTW-4, FTW-5 and FTW-6 and a rinsate sample.
- laboratory analysis of ground water samples for Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX), Methyl-t-Butyl Ether (MTBE), TMB, Ethylene Dibromide (EDB), Ethylene Dichloride (EDC), Naphthalene, 1-Methynaphthalene and 2-Methylnaphthalene by EPA Method 8260 PBMS (expanded napthalenes), for dissolved iron, lead and manganese by EPA Method 6010B, and for polynuclear aromatics (PNA) by EPA Method 8270 SIMS in wells MW-1 and MW-5.
- field testing for natural attenuation indicators of ground water samples, including phosphate, sulfide, nitrate, alkalinity, pH, dissolved oxygen, conductivity, and temperature.

The locations of all monitor wells are shown on Figure 1. Monitoring and sampling procedures are described in Appendix 1. Table 4 provides a historical summary of field activities at the site and Appendix 2 contains this quarter's original Field Activity Logs. The laboratory results of the ground water analyses for the current monitoring period are shown on Table 1. Historic sampling results for both organic and inorganic compounds are shown on Tables 2a and 2b. Laboratory reports and the Chain of Custody Form are provided in Appendix 3.

During this quarter's sampling event, no hydrocarbon constituent concentrations were above the NMWQCC standards. Benzene concentrations have been non-detectable in all of the sites monitoring well's since sampling was conducted for the initial site investigation in September 2000. A total BTEX summary and contour map for the fifth quarter ground water analysis are shown on Figure 1. In an effort to more realistically characterize the analytical data generated from the quarterly sampling, FEI has adopted a reporting standard of multi-component compounds like total Xylenes (see Appendix 1).

Depth to ground water during this quarter's sampling event varied from 10.61 feet below ground surface (bgs) in MW-9 to 12.39 feet bgs in MW-3. All ground water elevation data including the historical data is summarized in Table 3. This quarter's measurements of on-site ground water elevations indicate a defined directional flow in a southern orientation. A water elevation summary and directional flow map for the fifth quarter ground water measurements are shown on Figure 2.

II. D. System performance and effectiveness

Not Applicable, See II. A. and B.

II. E. Statement verifying containment of release

Based on ground water sample results from site perimeter monitor wells, containment of off-site ground water contaminants cannot be assured at the Phil's Auto Site under present conditions. Dissolved phase hydrocarbons in the ground water are within the highway easement to the east of the site outside perimeter monitoring well MW-1. Off-site migration of contaminants with reference to the southern ground water directional flow may have occurred near monitoring well MW-4 into the adjoining private property. Please refer to Figure 1. There is no evidence to suggest other off-site, up-gradient sources of contaminant for the BTEX concentration levels in MW-1.

III. SUMMARY AND CONCLUSIONS:

III. A. Discussion of trends or changes noted in analytical results or site conditions

BTEX concentrations in ground water have remained below the NMWQCC standards in all monitoring wells since the site's initial sampling events on September 18, 2000. Laboratory results obtained during this fifth quarter sampling event indicate that BTEX concentrations in the ground water are within the highway easement to the east but are below the NMWQCC standards for these compounds. The short historical trend of BTEX concentrations for monitor wells MW-1 and MW-2 indicates that the overall concentration levels have been diminishing. Monitoring wells MW-1 and MW-2 are located at the northern periphery of the contamination plume. Changes in BTEX concentrations of these wells suggest the plume may be under going ground water dispersion and a southern migration of contaminates.

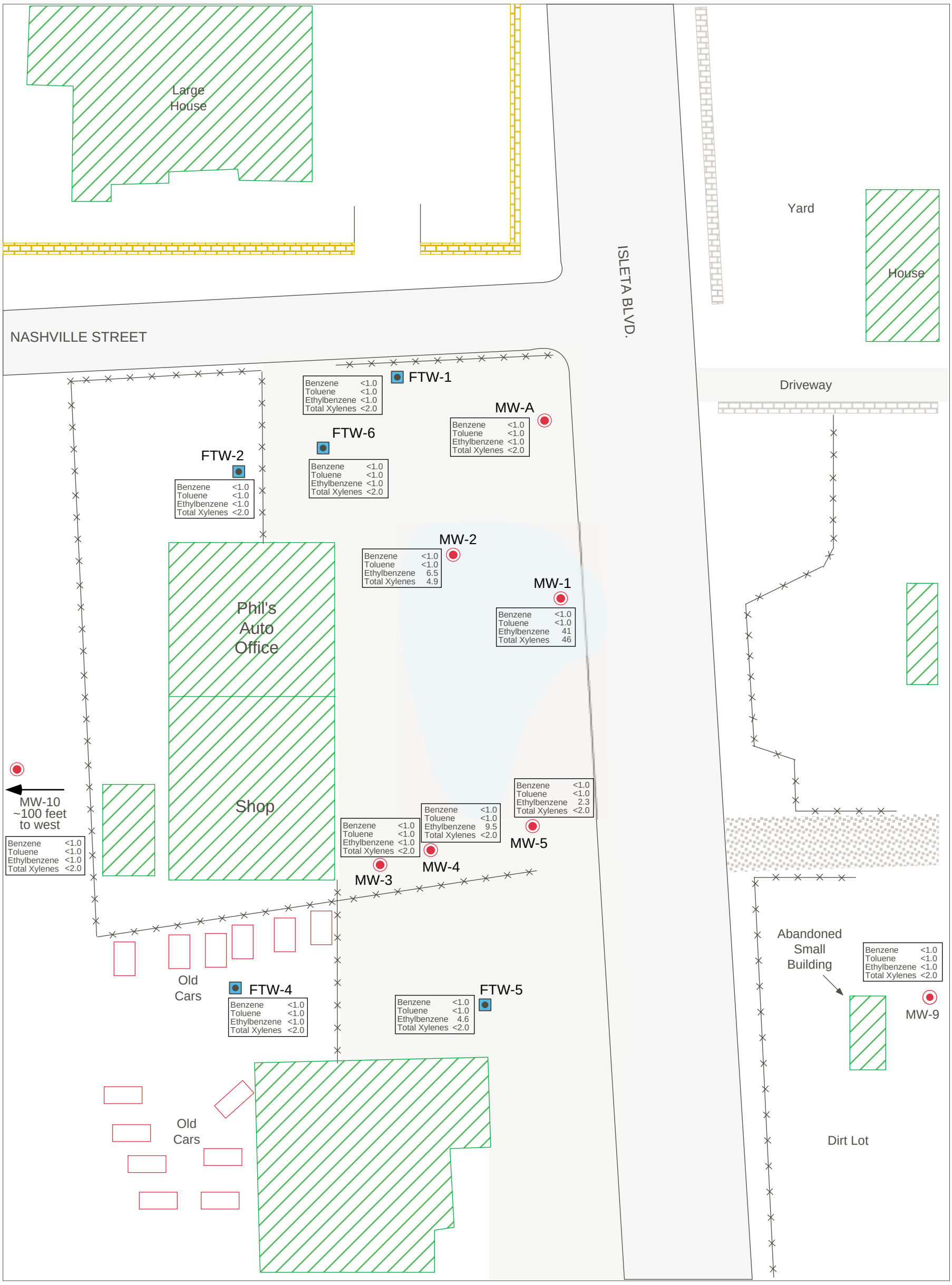
These results also indicate that the contaminant plume may be characterized as an older and weathered petroleum release.

III. B. Ongoing assessment of the remediation system

Not Applicable, See II. A. and B.

III. C. Recommendations

FEI recommends continuing site monitoring and sampling pursuant to the existing work plan approved on 02/11/02, as amended to change the 5th quarterly report submission date. The next quarterly sampling report will be submitted by 06/30/02.



LEGEND

- Building
- Concrete
- Asphalt
- Fence Line
- Adobe or Brick Wall
- New 2" Diameter Monitor Well
- Existing Monitor Well Location

BTEX Concentration Levels and Plume — 10-100 ppm

Benzene <1.0
Toluene <1.0
Ethylbenzene <1.0
Total Xylenes <2.0

N

0 15 30ft
Scale

Phil's Auto Site
701 Isleta Blvd. SW
Albuquerque, New Mexico

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Subject: Site Map and BTEX Concentration Levels		
Drawn by: KGF	Client: BCEHD	
Date : April 2002	Figure: 1	Project: 99-02-1183

Large House

ISLETA BLVD.

Yard

House

NASHVILLE STREET

FTW-1
4933.03

MW-A
4933.04

FTW-6
4933.04

FTW-2
4933.02

4933.02

Driveway

MW-2
4933.01

MW-1
4932.98

4932.99

Phil's Auto Office

Ground Water Flow Direction

4932.96

4932.96

MW-10
~100 feet
to west

Shop

4932.94
MW-5

4932.95
MW-4

4932.94
MW-3

4932.93

Abandoned Small Building

4932.94
MW-9

Old Cars

4932.92
FTW-4

4932.92
FTW-5

Old Cars

Dirt Lot

LEGEND

- Building
- Concrete
- Asphalt
- Fence Line
- Adobe or Brick Wall
- New 2" Diameter Monitor Well
- Existing Monitor Well Location
- Ground Water Contour 0.03 ft Intervals
- 4932.93 Ground Water Elevations

N

0 15 30ft
Scale

Phil's Auto Site
701 Isleta Blvd. SW
Albuquerque, New Mexico

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Subject: Ground WaterContour Map		
Drawn by: KGF	Client: BCEHD	
Date : April 2002	Figure: 2	Project: 99-02-1183

TABLE 1
Phil's Auto • 701 Isleta
99-02-1183-05 • NMED FACILITY #1537
Current Results of Ground Water Analyses

		ORGANICS											INORGANICS								INDICATORS		
LOCATION	**DATE SAMPLED**	**BENZENE**	**TOLUENE**	**ETHYL BENZENE**	**Total XYLENES**	**MTBE**	**EDB**	**EDC**	**TMB**	**NAPHTHALENE**	**1-METHYL NAPHTHALENE**	**2-METHYL NAPHTHALENE**	**DISSOLVED IRON**	**DISSOLVED LEAD**	**DISSOLVED MANGANESE**	**PHOSPHATE**	**SULFIDE**	**DISSOLVED OXYGEN**	**TOTAL ALKALINITY**	**NITRATE**	**pH**	**CONDUCTIVITY**	**TEMPERATURE**
UNITS		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	mg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	µmhos/cm	˚C
STANDARDS		**10**	**750**	**750**	**620**	**100**	**0.1**	**10**		TOTAL: **30**			**1.0**	**50**	**0.2**					**10**			
MW-A	3/28/02	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0	0.40	1.2	0.0749	0.6	0	1.5	200	0.3	7.77	712	18.5
MW-1	3/28/02	< 1.0	< 1.0	41	46	< 1.0	< 1.0	< 1.0	29.6	8.3	< 5.0	< 5.0	0.35	0.9	**0.396**	0.2	0.4	1.0	150	0	7.80	675	18.8
MW-2	3/28/02	< 1.0	< 1.0	6.5	4.9	< 1.0	< 1.0	< 1.0	16.3	0.8 †	< 0.4 †	< 0.4 †	0.43	0.9	**0.401**	0.2	0.1	1.0	225	0	7.97	754	17.4
MW-3	3/28/02	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0	0.48	0.8	**0.979**	0.3	0	1.0	250	0	7.68	744	20.2
MW-4	3/28/02	< 1.0	< 1.0	9.5	< 2.0	< 1.0	< 1.0	< 1.0	12	4.0	< 5.0	< 5.0	**1.66**	0.6	**1.79**	0.8	0	1.0	275	0.1	7.78	808	19.5
MW-5	3/28/02	< 1.0	< 1.0	2.3	< 2.0	< 1.0	< 1.0	< 1.0	81	0.5 †	< 0.4 †	< 0.4 †	**1.26**	0.5	**0.898**	0.6	0.4	1.0	200	0	7.92	674	19.5
MW-10	3/28/02	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	16.9	< 3.0	< 5.0	< 5.0	0.48	0.6	0.199	1.0	0	1.0	225	0.4	7.46	692	20.0
FTW-1	3/28/02	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0	0.24	0.8	0.0709	0.6	0	1.0	225	0.3	7.79	753	18.1
FTW-2	3/28/02	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0	0.27	0.5	0.136	1.0	0	1.0	225	1.0	7.71	604	17.3
FTW-4	3/28/02	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0	0.81	1.2	**1.10**	1.5	0	2.0	300	0	7.67	732	18.2
FTW-5	3/28/02	< 1.0	< 1.0	4.6	< 2.0	< 1.0	< 1.0	< 1.0	2.9	< 3.0	< 5.0	< 5.0	**1.53**	0.4	**2.27**	1.0	0	1.0	250	0	7.87	714	17.6
FTW-6	3/28/02	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0	0.37	0.5	0.150	0.8	0	2.0	150	1.0	7.64	714	17.6
RINSATE	3/28/02	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0											

† -Results for Speciated Naphthalenes from EPA Method 8270 SIMS

Data checked _____ / _____

Faith Engineering, Inc
4/24/02

TABLE 2a
Phil's Auto • 701 Isleta
99-02-1183-05 • NMED FACILITY #1537
History of Ground Water Sampling Analyses - Organics

		ORGANICS										
LOCATION	**DATE SAMPLED**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**MTBE**	**EDB**	**EDC**	**TMB**	**NAPHTHALENE**	**1-METHYL NAPHTHALENE**	**2-METHYL NAPHTHALENE**
UNITS		µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
STANDARDS		**10**	**750**	**750**	**620**	**100**	**0.1**	**10**		**30**		
MW - A	9/18/00	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	*	*
	5/25/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	2.8	**9.2**	**16**	**23**
	7/3/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	<0.4 †	<0.4 †	<0.4 †
	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0
	3/28/02	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0
MW - 1	9/18/00	< 5.0	7.2	120	248	< 5.0	< 5.0	< 5.0	134	**35**	*	*
	5/25/01	< 1.0	3.0	75	156	< 1.0	< 1.0	< 1.0	66	**18**	**9.5**	**8.5**
	7/3/01	< 5.0	< 5.0	58	37.8	< 5.0	< 5.0	< 5.0	27.8	7.8	< 25	< 25
	10/2/01	< 1.0	3.7	150	354	< 1.0	< 1.0	< 1.0	176	**55**	**11**	**15**
	3/28/02	< 1.0	< 1.0	41	46	< 1.0	< 1.0	< 1.0	29.6	8.3	< 5.0	< 5.0
MW - 2	9/18/00	< 1.0	< 1.0	42	74	< 1.0	< 1.0	< 1.0	84	25	*	*
	5/25/01	< 1.0	< 1.0	22	58.7	< 1.0	< 1.0	< 1.0	61	15	< 5.0	< 5.0
	7/3/01	< 1.0	< 1.0	27	19.2	< 1.0	< 1.0	< 1.0	36	11	< 5.0	< 5.0
	10/2/01	< 1.0	< 1.0	43	44.4	< 1.0	< 1.0	< 1.0	86	26	< 5.0	< 5.0
	3/28/02	< 1.0	< 1.0	6.5	4.9	< 1.0	< 1.0	< 1.0	16.3	0.8 †	< 0.4 †	< 0.4 †
MW - 3	9/18/00	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	*	*
	5/25/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	1.8	< 5.0	< 5.0
	7/3/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 5.0	< 5.0
	10/2/01	< 1.0	< 1.0	97	196	< 1.0	< 1.0	< 1.0	214	**71**	**10**	**13**
	3/28/02	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0
MW - 4	9/18/00	< 1.0	< 1.0	11	< 8.0	< 1.0	< 1.0	< 1.0	15.5	3.6	*	*
	5/25/01	<1.0	1.5	41	26	<1.0	<1.0	<1.0	37.7	15	<5.0	<5.0
	7/3/01	< 1.0	< 1.0	60	6.3	< 1.0	< 1.0	< 1.0	39.1	21	< 5.0	< 5.0
	10/2/01	< 1.0	< 1.0	92	184	< 1.0	< 1.0	< 1.0	202	**62**	**7.3**	**10**
	3/28/02	< 1.0	< 1.0	9.5	< 2.0	< 1.0	< 1.0	< 1.0	12	4.0	< 5.0	< 5.0
MW - 5	9/18/00	< 1.0	< 1.0	3.2	< 2.0	< 1.0	< 1.0	< 1.0	< 2.7	2.8	*	*
	5/25/01	< 1.0	< 1.0	1.9	< 2.0	< 1.0	< 1.0	< 1.0	2.4^	<1.0	< 5.0	< 5.0
	7/3/01	< 1.0	< 1.0	8.9	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	5.4	< 5.0	< 5.0
	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0
	3/28/02	< 1.0	< 1.0	2.3	< 2.0	< 1.0	< 1.0	< 1.0	81	0.5 †	< 0.4 †	< 0.4 †

TABLE 2a
Phil's Auto • 701 Isleta
99-02-1183-05 • NMED FACILITY #1537
History of Ground Water Sampling Analyses - Organics

		ORGANICS										
LOCATION	**DATE SAMPLED**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**MTBE**	**EDB**	**EDC**	**TMB**	**NAPHTHALENE**	**1-METHYL NAPHTHALENE**	**2-METHYL NAPHTHALENE**
UNITS		**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**
STANDARDS		**10**	**750**	**750**	**620**	**100**	**0.1**	**10**		**30**		
MW - 9	9/18/00	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	*	*
	5/25/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	<1.0	< 5.0	< 5.0
	7/3/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 5.0	< 5.0
	10/3/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0
MW - 10	9/18/00	< 5.0	< 5.0	18	< 10	< 5.0	< 5.0	< 5.0	318	12	*	*
	5/25/01	<5.0	<5.0	26	<10.0	<5.0	<5.0	<5.0	529	**11**	**45**	**<25**
	7/3/01	< 1.0	< 1.0	8.5	2.6	< 1.0	< 1.0	< 1.0	279	3.4	23	< 5.0
	10/3/01	< 1.0	< 1.0	4.1	< 2.0	< 1.0	< 1.0	< 1.0	150	3.6	26	< 5.0
	3/28/02	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	16.9	< 3.0	< 5.0	< 5.0
FTW-1	1/30/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01	< 1.0	< 2.0	< 1.0	*	*
	5/25/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	2.2	<1.0	< 5.0	< 5.0
	7/3/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 5.0	< 5.0
	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0
	3/28/02	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0
FTW-2	1/30/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01	< 1.0	< 2.0	< 1.0	*	*
	5/25/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	<2.0	<1.0	< 5.0	< 5.0
	7/3/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 5.0	< 5.0
	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0
	3/28/02	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0
FTW-4	2/17/98	1.1	< 1.0	9.3	3.5	< 1.0	< 1.0	< 1.0	< 2.9	1.6	*	*
	5/25/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	<2.0	<1.0	< 5.0	< 5.0
	7/3/01	< 1.0	< 1.0	3.6	< 2.0	< 1.0	< 1.0	< 1.0	2.8	5.0	< 5.0	< 5.0
	10/2/01	< 1.0	< 1.0	1.8	10.8	< 1.0	< 1.0	< 1.0	31.2	7.6	< 5.0	< 5.0
	3/28/02	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0

TABLE 2a
Phil's Auto • 701 Isleta
99-02-1183-05 • NMED FACILITY #1537
History of Ground Water Sampling Analyses - Organics

		ORGANICS										
LOCATION	**DATE SAMPLED**	**Benzene**	**Toluene**	**Ethylbenzene**	**Total Xylenes**	**MTBE**	**EDB**	**EDC**	**TMB**	**NAPHTHALENE**	**1-METHYL NAPHTHALENE**	**2-METHYL NAPHTHALENE**
UNITS		**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**	**µg/l**
STANDARDS		**10**	**750**	**750**	**620**	**100**	**0.1**	**10**		**30**		
FTW-5	1/30/01	< 1.0	< 1.0	4.8	< 2.5	< 1.0	< 0.01	< 1.0	32.5	6.5	*	*
	5/25/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	2.1	1.4	< 5.0	< 5.0
	7/3/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 5.0	< 5.0
	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	3.2	< 5.0	< 5.0
	3/28/02	< 1.0	< 1.0	4.6	< 2.0	< 1.0	< 1.0	< 1.0	2.9	< 3.0	< 5.0	< 5.0
FTW-6	1/30/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 0.01	< 1.0	< 2.0	< 1.0	*	*
	5/25/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	<2.0	<1.0	<5.0	< 5.0
	7/3/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	<0.4 †	<0.4 †	<0.4 †
	10/2/01	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0
	3/28/02	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 2.0	< 3.0	< 5.0	< 5.0

† - Results from EPA Method 8270 SIMS Analysis
* - Not Sampled

Data checked _____ / _____

TABLE 2b
Phil's Auto • 701 Isleta
99-02-1183-05 • NMED FACILITY #1537
History of Ground Water Sampling Analysis - Inorganics

		INORGANICS											INDICATORS		
LOCATION	DATE SAMPLED	IRON		DISSOLVED IRON	DISSOLVED LEAD	DISSOLVED MANGANESE	PHOSPHATE	SULFIDE	ALKALINITY as CaCO.	DISS O2		NITRATE	pH	CONDUCTIVITY	TEMP
UNITS		mg/l		mg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		µmhos/cm	˚C
STANDARDS		SOLUBLE	TOTAL-1.0	1.0	50	0.2				METER	FIELD	10			
MW - A	9/18/00	0.4	0.4	*	*	*	1.0	0	250	*	0.5	0.8	6.63	936	26.3
	5/25/01	*	0.8	*	*	*	2.0	0	195	*	1.0	1.5	6.68	886	21.5
	7/3/01	*	**2.0**	*	*	*	3.0	0	195	*	1.0	1.5	6.80	886	24.5
	10/2/01	*	**1.5**	*	*	*	1.5	< 1.0	175	0.01	*	2.5	7.79	813	24.4
	3/28/02	*	*	0.40	1.2	0.0749	0.6	0	200	*	1.5	0.3	7.77	712	18.5
MW - 1	9/18/00	0.6	0.8	*	*	*	1.0	1.0	325	*	0.5	0.2	6.94	943	23.4
	5/25/01	*	0.4	*	*	*	2.0	0.2	250	*	1.0	1.5	6.75	813	21.2
	7/3/01	*	0.6	*	*	*	2.0	0	175	*	1.0	1.5	6.84	845	22.6
	10/2/01	*	< 1.0	*	*	*	1.0	< 1.0	200	0.01	*	1.0	7.84	771	22.9
	3/28/02	*	*	0.35	0.9	**0.396**	0.2	0.4	150	*	1.0	0	7.80	675	18.8
MW - 2	9/18/00	0.3	0.4	*	*	*	0.8	1.0	250	*	1.0	0.6	6.99	1002	23.2
	5/25/01	*	0.4	*	*	*	3.0	0	300	*	2.0	1.0	6.80	967	20.2
	7/3/01	*	0.2	*	*	*	2.0	0	175	*	0.5	1.0	6.87	1015	22.0
	10/2/01	*	< 1.0	*	*	*	1.0	< 1.0	200	0.01	*	2.3	7.89	910	22.2
	3/28/02	*	*	0.43	0.9	**0.401**	0.2	0.1	225	*	1.0	0	7.97	754	17.4
MW - 3	9/18/00	0.1	0.6	*	*	*	0.4	0	225	*	2.0	0.2	6.87	841	21.6
	5/25/01	*	**3.0**	*	*	*	3.0	0	225	*	2.0	1.0	6.83	771	21.2
	7/3/01	*	0.6	*	*	*	2.0	0	175	*	0.0	1.0	6.65	881	20.7
	10/2/01	*	**2.0**	*	*	*	1.0	< 1.0	200	0.02	*	1.0	7.88	885	23.2
	3/28/02	*	*	0.48	0.8	**0.979**	0.3	0	250	*	1.0	0	7.68	744	20.2
MW - 4	9/18/00	2.0	**2.0**	*	*	*	1.0	0.1	250	*	1.0	0.2	6.88	961	24.6
	5/25/01	*	**4.0**	*	*	*	3.0	0	250	*	2.0	0.4	6.73	977	22.2
	7/3/01	*	**3.0**	*	*	*	4.0	0	200	*	0.5	1.0	6.69	1054	21.8
	10/2/01	*	**2.0**	*	*	*	1.0	< 1.0	200	0.01	*	1.0	7.83	931	24.9
	3/28/02	*	*	**1.66**	0.6	**1.79**	0.8	0	275	*	1.0	0.1	7.78	808	19.5
MW - 5	9/18/00	1.0	**1.5**	*	*	*	1.5	0	250	*	0.5	0.4	6.88	958	24.3
	5/25/01	*	**3.0**	*	*	*	2.0	0	250	*	2.0	0.6	6.77	836	21.3
	7/3/01	*	**2.0**	*	*	*	2.0	0	250	*	0.0	1.0	6.79	883	21.9
	10/2/01	*	**2.5**	*	*	*	1.0	< 1.0	225	0.01	*	1.0	7.86	780	24.2
	3/28/02	*	*	**1.26**	0.5	**0.898**	0.6	0.4	200	*	1.0	0	7.92	674	19.5

TABLE 2b
Phil's Auto • 701 Isleta
99-02-1183-05 • NMED FACILITY #1537
History of Ground Water Sampling Analysis - Inorganics

		INORGANICS											INDICATORS		
LOCATION	DATE SAMPLED	IRON		DISSOLVED IRON	DISSOLVED LEAD	DISSOLVED MANGANESE	PHOSPHATE	SULFIDE	ALKALINITY as CaCO.	DISS O2		NITRATE	pH	CONDUCTIVITY	TEMP
UNITS		mg/l		mg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		µmhos/cm	˚C
STANDARDS		SOLUBLE	TOTAL-1.0	1.0	50	0.2				METER	FIELD	10			
MW - 9	9/18/00	0	0.1	*	*	*	5.0	0	250	*	2.0	1.5	6.67	1160	20.8
	5/25/01	*	0.1	*	*	*	5.0	0	295	*	2.0	1.5	6.80	994	21.3
	7/3/01	*	0.1	*	*	*	6.0	0	195	*	0.5	1.0	6.77	1096	19.5
	10/3/01	*	**1.0**	*	*	*	1.0	< 1.0	150	0.01	*	1.0	8.00	1046	20.8
MW - 10	9/18/00	0.8	**1.0**	*	*	*	2.0	0.2	350	*	1.0	0.4	7.10	1375	22.0
	5/25/01	*	0.8	*	*	*	5.0	0	350	*	1.0	0.8	6.74	1035	19.7
	7/3/01	*	0.8	*	*	*	4.0	0	300	*	0.5	1.0	6.89	1075	19.6
	10/3/01	*	**1.5**	*	*	*	1.5	< 1.0	130	0.01	*	2.5	7.95	1085	21.2
	3/28/02	*	*	0.48	0.6	0.199	1.0	0	225	*	1.0	0.4	7.46	692	20.0
FTW-1	1/30/01	1.0	**2.0**	*	*	*	0.2	0.1	300	0.54	2.0	0.6	7.32	1047	16.2
	5/25/01	*	**4.0**	*	*	*	2.0	0	250	*	1.0	1.0	6.62	979	20.8
	7/3/01	*	0.6	*	*	*	3.0	0	250	*	1.0	1.5	6.91	1035	23.5
	10/2/01	*	**1.0**	*	*	*	1.0	< 1.0	150	0.01	*	2.5	7.87	900	23.2
	3/28/02	*	*	0.24	0.8	0.0709	0.6	0	225	*	1.0	0.3	7.79	753	18.1
FTW-2	1/30/01	1.0	**5.0**	*	*	*	1.5	0.8	300	1.59	2.0	1.5	7.44	857	15.1
	5/25/01	*	0	*	*	*	3.0	0	250	*	0.5	2.0	6.74	812	20.3
	7/3/01	*	**1.5**	*	*	*	3.0	0	200	*	1.0	1.5	6.73	926	21.8
	10/2/01	*	**1.0**	*	*	*	2.0	< 1.0	200	0.01	*	4.0	7.89	828	22.0
	3/28/02	*	*	0.27	0.5	0.136	1.0	0	225	*	1.0	1.0	7.71	604	17.3
FTW-4	2/16/01	1.6	*	*	*	*	< 0.05	*	390	0.49	*	< 0.10	7.47	794	16.5
	5/25/01	*	**2.0**	*	*	*	3.0	0	250	*	0	0.5	6.75	825	20.4
	7/3/01	*	**2.0**	*	*	*	4.0	0	250	*	0.5	1.0	6.73	877	20.4
	10/2/01	*	**2.5**	*	*	*	1.5	< 1.0	150	0.05	*	< 1.0	7.87	798	21.3
	3/28/02	*	*	0.81	1.2	**1.10**	1.5	0	300	*	2.0	0	7.67	732	18.2

TABLE 2b
Phil's Auto • 701 Isleta
99-02-1183-05 • NMED FACILITY #1537
History of Ground Water Sampling Analysis - Inorganics

		INORGANICS											INDICATORS		
LOCATION	**DATE SAMPLED**	**IRON**		**DISSOLVED IRON**	**DISSOLVED LEAD**	**DISSOLVED MANGANESE**	**PHOSPHATE**	**SULFIDE**	**ALKALINITY as CaCO.**	**DISS O2**		**NITRATE**	**pH**	**CONDUCTIVITY**	**TEMP**
UNITS		**mg/l**		mg/l	µg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		µmhos/cm	˚C
STANDARDS		SOLUBLE	TOTAL-**1.0**	**1.0**	**50**	**0.2**				METER	FIELD	**10**			
FTW-5	1/30/01	3.0	**4.0**	*	*	*	0.2	5.0	350	0.82	0.5	0.6	7.33	899	17.4
	5/25/01	*	**3.0**	*	*	*	1.5	0	350	*	1.0	1.0	6.74	871	21.7
	7/3/01	*	**2.0**	*	*	*	3.0	0	250	*	0.5	1.0	6.72	906	22.0
	10/2/01	*	**3.0**	*	*	*	1.0	< 1.0	175	0.03	*	1.0	7.85	828	24.0
	3/28/02	*	*	**1.53**	0.4	**2.27**	1.0	0	250	*	1.0	0.0	7.87	714	17.6
FTW-6	1/30/01	0.2	0.6	*	*	*	1.0	0.2	175	1.26	1.0	1.5	7.31	91.6	14.8
	5/25/01	*	0.3	*	*	*	2.0	0	295	*	0.5	1.5	6.79	898	19.5
	7/3/01	*	0.4	*	*	*	3.0	0	250	*	2.0	1.5	6.79	942	20.9
	10/2/01	*	**1.5**	*	*	*	2.0	< 1.0	175	0.01	*	3.0	7.88	940	22.8
	3/28/02	*	*	0.37	0.5	0.150	0.8	0	150	*	2.0	1.0	7.64	714	17.6

* - Not Sampled

Data checked _____ / _____

TABLE 3
Phil's Auto • 701 Isleta
99-02-1183-05 • NMED FACILITY #1537
Summary of Ground Water Elevation Measurements

WELL NUMBER	ELEVATION (well casing datum)	DATE	STATIC (feet BG)	WATER LEVEL (above datum)	(+) = RISING (-) = FALLING
MW-A	4944.5	9/14/00	11.73	4932.77	
		5/25/01	11.30	4933.20	0.43
		7/3/01	11.66	4932.84	-0.36
		10/2/01	11.53	4932.97	0.13
		3/28/02	11.46	4933.04	0.07
MW-1	4944.58	9/14/00	11.84	4932.74	
		5/25/01	11.41	4933.17	0.43
		7/3/01	11.78	4932.80	-0.37
		10/2/01	11.66	4932.92	0.12
		3/28/02	11.60	4932.98	0.06
MW-2	4945.08	9/14/00	12.33	4932.75	
		5/25/01	11.91	4933.17	0.42
		7/3/01	12.27	4932.81	-0.36
		10/2/01	12.16	4932.92	0.11
		3/28/02	12.07	4933.01	0.09
MW-3	4945.33	9/14/00	12.64	4932.69	
		5/25/01	12.20	4933.13	0.44
		7/3/01	12.58	4932.75	-0.38
		10/2/01	12.47	4932.86	0.11
		3/28/02	12.39	4932.94	0.08
MW-4	4945.06	9/14/00	12.37	4932.69	
		5/25/01	11.93	4933.13	0.44
		7/3/01	12.31	4932.75	-0.38
		10/2/01	12.19	4932.87	0.12
		3/28/02	12.11	4932.95	0.08
MW-5	4944.38	9/13/00	11.69	4932.69	
		5/25/01	11.26	4933.12	0.43
		7/3/01	11.64	4932.74	-0.38
		10/2/01	11.52	4932.86	0.12
		3/28/02	11.44	4932.94	0.08
MW-9	4943.55	9/14/00	10.86	4932.69	
		5/25/01	10.43	4933.12	0.43
		7/3/01	10.82	4932.73	-0.39
		10/3/01	10.68	4932.87	0.14
		3/28/02	10.61	4932.94	0.07

TABLE 3
Phil's Auto • 701 Isleta
99-02-1183-05 • NMED FACILITY #1537
Summary of Ground Water Elevation Measurements

WELL NUMBER	ELEVATION (well casing datum)	DATE	STATIC (feet BG)	WATER LEVEL (above datum)	(+) = RISING (-) = FALLING
MW-10	4943.85	9/14/00	11.18	4932.67	
		5/25/01	10.72	4933.13	0.46
		7/3/01	11.11	4932.74	-0.39
		10/3/01	11.15	4932.70	-0.04
		3/28/02	10.89	4932.96	0.26
FTW-1	4944.45	5/25/01	11.25	4933.20	
		7/3/01	11.62	4932.83	-0.37
		10/2/01	11.50	4932.95	0.12
		3/28/02	11.42	4933.03	0.08
FTW-2	4945.08	5/25/01	11.87	4933.21	
		7/3/01	12.25	4932.83	-0.38
		10/2/01	12.14	4932.94	0.11
		3/28/02	12.06	4933.02	0.08
FTW-4	4943.98	5/25/01	10.90	4933.08	
		7/3/01	11.26	4932.72	-0.36
		10/2/01	11.14	4932.84	0.12
		3/28/02	11.06	4932.92	0.08
FTW-5	4944.02	5/25/01	10.92	4933.10	
		7/3/01	11.30	4932.72	-0.38
		10/2/01	11.18	4932.84	0.12
		3/28/02	11.10	4932.92	0.08
FTW-6	4944.59	5/25/01	11.38	4933.21	
		7/3/01	11.75	4932.84	-0.37
		10/2/01	11.64	4932.95	0.11
		3/28/02	11.55	4933.04	0.09

Data checked _____ / _____

Table 4
Phil's Auto • 701 Isleta
99-02-1183-05 • NMED Facility # 1537
Summary of Tasks Performed in the Field

DATE	FIELD TECH.	DESCRIPTION
9/18/00	KGF, MB	Initial sampling round(1st Qtr)-all existing monitoring wells, site survey.
10/13/00	BB, TC	Drilling on site(Tecumseh)
10/16/00	BB, TC	Drilling on site(Tecumseh)
12/5/00 & 12/6/00	BB, TC	Drilling on site(Tecumseh)
1/30/01	MB, TC	Developing and sampling new wells(Faith/Tecumseh)
2/2/01	BB, TC	Drilling on site(Tecumseh)
5/25/01	MB, KL	2nd Qtrly sampling round, all 13 monitoring wells.
7/3/01	MB, KL	3rd Qtrly sampling round, all 13 monitoring wells.
10/2/01 & 10/3/01	PJB	4th Qtrly sampling round, all 13 monitoring wells(Tecumseh)
3/28/02	MB, DL	5th Qtrly sampling round, all wells except MW-9.

Data checked _____ / _____

APPENDIX 1

Sampling Protocol

Prior to any sampling, well development or purging, all monitor wells were sounded for depth to ground water. FEI used an electronic sounder with an accuracy of ±0.01/foot. Ground water elevations (from datum) were determined using survey data collected during the Hydrogeologic Investigation.

Prior to any sampling event, a minimum of three (3) well bore volumes were purged from each well using a Grundfos Sampling Pump. Samples were collected in HCl preserved VOAs and placed on ice in a container for delivery to Pinnacle Laboratories, in Albuquerque, New Mexico, for analyses. The ground water samples were analyzed for Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX), Methyl-t-Butyl Ether (MTBE), TMB, Ethylene Dibromide (EDB), Ethylene Dichloride (EDC), Naphthalene, 1-Methylnaphthalene and 2-Methylnaphthalene by EPA Method 8260 PBMS (expanded napthalenes) and for polynuclear aromatics (PNA) by EPA Method 8270 SIMS in wells MW-2 and MW-5. Ground water from all wells was also analyzed for dissolved iron, lead and manganese by EPA Method 6010B. Natural attenuation indicator parameters phosphate, sulfide, alkalinity, pH, dissolved oxygen, conductivity, temperature and nitrate were analyzed and measured in the field using the appropriate field test kits and equipment. All EPA-approved sampling protocols were observed and a chain of custody was maintained on all samples.

In an effort to more realistically characterize the analytical data generated from the quarterly sampling, FEI has adopted a reporting standard of multi-component compounds like total xylenes. Detection limit values in a multi-component compound that are reported as below detection limits and are less than 10 percent of the lowest detectable value will not be added-in as part of the total concentration value reported. Detection limit values greater than 10 percent of the lowest detectable value will be added-in as part of the total concentration value reported. This will eliminate confusion regarding the “less-than” symbols where concentrations have been detected.

APPENDIX 2

Field Notes

APPENDIX 3

Analytical Laboratory Reports